

ETV Pilot for Indoor Air Products

General Ventilation Air Filters Stakeholder Meeting Research Triangle Park, NC January 22, 1999

Background

The fourth meeting of the Task Force on Ventilation Air Filters was held at the Palmer House, Chicago, IL on January 22, 1999. The [attendees](#) are shown below.

Action Items

1. RTI will write and distribute the minutes. Draft minutes will be sent to those who attended the meeting to allow them to comment before minutes are sent to all stakeholders and a summary posted on the web.
2. RTI and EPA will look at having a second transition meeting. Suggested date was June 1999 in Seattle in conjunction with the ASHRAE meeting.

Discussion

Dave Ensor convened the meeting and welcomed the attendees. There were introductions and the agenda was accepted. Debbie Franke presented the minutes from the previous stakeholder meeting. R. Vijayakumar said that in the minutes for the testing meeting (May 1998), there could have been a more complete write up of the discussion. Those minutes will not be changed.

Jim Hanley presented results of the filter testing. Three laboratories participated in the tests. The tests were intended to validate the protocol -- to ensure that labs other than RTI could run the tests and obtain comparable results for a similar type of filter. Each of the three laboratories also provided lab qualification data as shown in the attachment. A complete report of this testing will be written for EPA and should be ready by summer. It will be distributed to the stakeholders and available on the Web site once completed.

Dave Ensor gave an overview of the accomplishments of the program. As defined by EPA policy decisions and developed by RTI, the Indoor Air ETV program is developing and validating infrastructure for testing programs, including testing protocols and quality management. There will then be transition to private testing programs. Separate stakeholder groups are being convened for each industry sector or product type. These groups provide input and review the test protocol. For the general ventilation air filter program, RTI has

- Continued studying the conditioning step. Results of the study were presented at a previous meeting (May 18, 1998). Contact RTI for further details. The conditioning step is based on RTI research and is to mimic as much as possible what has been observed in evaluations of filters used in homes and commercial buildings. The conditioning step was incorporated into RTI's ETV filter test method.
- Assessed the ASHRAE 52.2 test rigs at two test laboratories and run parallel tests with these labs and RTI.
- Developed QA/QC and lab assessment procedures for the test method. This included developing a checklist that can be used for future laboratory assessments. This checklist will be posted on the RTI web site (etv.rti.org) once it has been reviewed.

RTI sees that further research should be done, including round robin tests and test dust studies already discussed by ASHRAE. The standards activity should continue after 52.2 is approved to incorporate conditioning and electronic air cleaners.

Al Veeck discussed progress in the development of the NAFA media filter-testing program. This effort began with a long-range plan in 1994 and with discussions at RTI in 1995. They are currently on their seventh draft proposal for the testing program. There is unanimous approval for some certification program. Their committee will be meeting during the ASHRAE meeting.

Dan Pike presented information on testing conducted by Kimberly Clark. Kimberly Clark is especially concerned with conditioning for charged-media filters and feels that the conditioning dust should reproduce the bimodal particle size distribution of dust found outdoors.

During general discussion, people said that they would like to see more testing: more testing of filters in actual use at additional sites and more filters at each of the test labs (to improve statistics). This was not planned as part of the ETV program, nor is there time or money for it. There was concern that the benefits of a testing program had not been determined sufficient to market the program. Chuck Rose suggested that people should attend the ASHRAE TC 2.4 meeting and support ASHRAE research projects. ASHRAE TC 2.4 is looking at a round-robin test, etc.

There was also discussion about whether products that had gone through the testing program would be considered "environmentally preferable" for government procurements. Dave Ensor said that the issue would be discussed within the ETV program at EPA and with GSA.

There was support for a meeting at the June ASHRAE meeting, with RTI convening the meeting. There would be reports from NAFA on progress of their testing program. from ASHRAE on TC 2.4 testing program. and from others as

appropriate. At this time, RTI does not expect to perform more ETV filter testing, nor does the number of filters already tested lend itself to extensive statistical analysis. RTI and EPA will look at the possibility of a June meeting.

It was felt that there were research needs that were more extensive than normally funded by ASHRAE and it was hoped that EPA could fund these, including media filter uniformity and the effect of the filter performance level on the indoor environment.

Attendees

Dean Arnold, Kimberly Clark

David Brooks, Purolator Products Co.

Tom Bruursema, NSF International

Howard Campbell, Airguard Industries

Dave Ensor, Research Triangle Institute

Debbie Franke, Research Triangle Institute

Jim Hanley, Research Triangle Institute

Dave Healey, Hollingsworth & Vose

Pauline Johnston, EPA

Donna Kasper, Hollingsworth & Vose

Skiter Kowalski, AQM Consultants

Jim Kubokawa, 3M

Louis Laroche, General Filters, Inc.

William Matkins, Aeolus Corporation

Mike McCarthy, Lydall Technical Papers

Bruce McDonald, Donaldson Company, Inc.

Roger Pasch, Research Products Corp.

Dan Pike, Kimberly Clark

Carl Redner, General Filters Inc.

Robert Redner, General Filters Inc.

Chuck Rose, AAF International

John Sabelli, Intertek Testing Service

Les Sparks, EPA

Don Thornburg, Farr

Al Veeck, Tidewater Air Filter, Inc.

R. Vijayakumar, Hollingsworth & Vose

Derald Welles, Tech-HVAC, Inc.

Phillip Winters, Filtration Group Inc.

James Wooldridge, Koch Filter Corp.